

CLAIMS

1. (Original) A method for dynamic emulation of legacy instructions comprising:
accessing said legacy instructions in legacy blocks,
for each particular legacy instruction in a particular legacy block,
translating the particular legacy instruction into one or more particular translated
instructions for emulating the particular legacy instruction,
organizing the particular translated instructions into one or more particular translated
blocks,
linking the particular translated blocks into a particular linked group corresponding to
said particular legacy instruction.

2. (Original) The method of Claim 1 wherein said linking step uses a link in each particular
translated block to point to a location of the next particular translated block of the particular linked
group.

3. (Original) The method of Claim 1 wherein said particular translated instructions are stored in a
cache and wherein said particular translated instructions are purged from said cache only when all
said particular translated instructions of particular translated blocks are also purged from said cache.

4. (Original) The method of Claim 1 wherein said legacy instructions are for a legacy system having
a S/390 architecture.

5. (Original) The method of Claim 1 wherein said legacy instructions are object code instructions
compiled/assembled for a legacy architecture.

6. (Original) The method of Claim 1 wherein said translated instructions are for execution in a
RISC architecture.

1 7. (Original) A method for dynamic emulation of legacy instructions, where the legacy instructions
2 are compiled/assembled into object code form for a native architecture, where the legacy instructions
3 are executed as guests in the host architecture, where the legacy instructions are translated to
4 translated instructions in the host architecture and the translated instructions are executed in the host
5 architecture concurrently with the translation of the legacy instructions in the host architecture,
6 comprising:

7 accessing said legacy instructions in legacy blocks of a host system operating with said host
8 architecture,

9 for each particular legacy instruction in a particular legacy block,

10 translating the particular legacy instruction into one or more particular translated
11 instructions of the host system for emulating the particular legacy instruction as a
12 guest in said host architecture,

13 organizing the particular translated instructions into one or more particular translated
14 blocks,

15 linking the particular translated blocks into a particular linked group corresponding to
16 said particular legacy instruction.